

COVER SHEET

Laboratory response to results of contract compliance screening (CCS)

Response To: (check one) ☒ Organics CCS
☐ Inorganic CCS

Response materials should be sent to the attention of the CCS coordinator.

Labcode: EQI Response date 01/13/2016

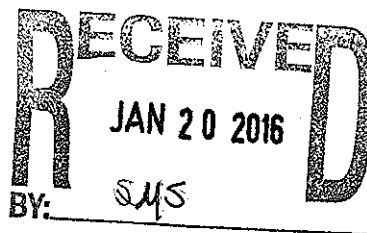
Date screening results received at the lab: 01/19/2016

EPA contract number: EPW14035

Case number: 45671

SDG number: F6R05

Fraction: SVOAsim, VOA



Sample Number: **VARIOUS**

**Only list sample numbers that require reconciliation.*

This form is used to identify materials sent in response to results of Contract Compliance Screening (CCS). A separate form must accompany the response for each fraction.

Please indicate on the attached continuation form which fractions and/or which criteria corresponds with your resubmission. Response materials sent to CCS should also be copied to the region with this blue cover sheet.

Attachment H

LABORATORY RESPONSE TO RESULTS OF CONTRACT COMPLIANCE SCREENING

LABCODE: EQI RESPONSE DATE: 01/19/2016

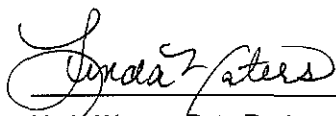
EPA CONTRACT No. EPW14035

CASE No. 45671

SDG No. F6R05

FRACTION: SVOAsim, VOA

Fraction	Defect	Defect Message	Action
SVOAsim	MD.3.4	Required information on Raw Data is discrepant	Replaced correct Raw Data information and submitted
NARRATIVE	MD.2.4	SDG Number is incorrect	Corrected SDG number and submitted



Linda Waters, Data Review
Robert Zhu, Technical Director
Shealy Environmental Services, Inc.
rzhu@shealylab.com
Phone 803-227-3152

Shealy Environmental Services, Inc.

SDG Narrative

01/04/2016

Case 45671

SDG F6R05

SOW: SOM02.3

Contract Number: EPW14035

Solicitation: 2655A

MA: 2544.1

Columns	TVOA/TVOA SIM/VOA DB-624, 30m x 0.25mm x 1.4um SVOA/SVOA SIM ZEBRON ZB-SV, 30m x 0.25mm x 0.5um
VOA Trap	OI #10

TVOA/VOA Equation	$\text{Water sample concentration (ug/L)} = \frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)}$ $\text{Soil sample concentration (ug/Kg)} = \frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(W_s)(D)}$ <p>Where A_x is the area of the characteristic ion (EICP) for the compound to be measured. A_{is} is the area of the characteristic ion (EICP) for the internal standard. I_s is the amount of internal standard added, in ng. RRF is the mean relative response factor from the initial calibration. DF is the dilution factor. V_o is total volume of water purged, in mL. W_s is the weight of sample added to the purge tube in g. $D = \frac{100 - \% \text{moisture}}{100}$</p>
SVOA/SVOA SIM Equation	$\text{Water sample concentration ug/L} = \frac{(A_x)(I_s)(V_i)(DF)(GPC)}{(A_{is})(RRF)(V_o)(V_i)}$ $\text{Soil sample concentration (ug/Kg)} = \frac{(A_x)(I_s)(V_i)(DF)(GPC)}{(A_{is})(RRF)(V_i)(W_s)(D)}$ <p>Where A_x is the area of the characteristic ion (EICP) for the compound to be measured. A_{is} is the area of the characteristic ion (EICP) for the internal standard. I_s is the amount of internal standard added, in ng. RRF is the mean relative response factor from the initial calibration. DF is the dilution factor. $GPC = V_{in}/V_{out}$: GPC factor. V_{in} is the volume of extract loaded onto GPC column. V_{out} is the volume of extract collected after GPC cleanup. V_i is volume of the concentrated extract in uL. (If no GPC cleanup is performed, then $V_i = 1000\text{uL}$. If GPC cleanup is performed, then $V_i = V_{out}$). V_i is the volume of the extract injected in uL. V_o: Volume of water extracted in mL. W_s is the weight of sample extracted in g. $D = \frac{100 - \% \text{Moisture}}{100}$</p>

Sample Receiving

The seventeen soil samples in this SDG were received in sealed shipping containers on December 08, 09 and 11, 2015. The cooler temperatures associated with these samples were 4.6, 1.4, 3, 3.6 and 3°C.

The temperature was determined using a calibrated Fluke 66 IR thermometer.

FORM 6A-OR MODIFIED
GC/MS INITIAL CALIBRATION DATA

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-14035

Lab Code: EQI Case No.: 45671

MA No: 2544.1 SDG No.: F6R05

Analytical Method: SVOA SIM

Level: Low

Instrument ID: Agilent MSD4

Calibration Date(s): 12/18/2015 12/18/2015

GC Column: Zebron ZB-SV ID: 0.25 (mm)

Calibration Time(s): 1425 1636

Length: 30 (m)

Heated Purge: (Y/N) _____

Purge Volume: _____ (mL)

LAB FILE ID: <u>41218B02</u> RRF <u>0.05</u> <u>41218B02</u> RRF <u>0.1</u> = <u>41218B03</u> RRF <u>0.2</u> = <u>41218B04</u> RRF <u>0.4</u> = <u>41218B05</u> RRF <u>0.8</u> = <u>41218B06</u> RRF <u>1.6</u> = <u>41218B07</u>								
COMPOUND	RRF0.05	RRF 0.1	RRF 0.2	RRF 0.4	RRF 0.8	RRF 1.6	RRF	%RSD
1,4-Dioxane		0.606	0.630	0.569	0.576	0.5650	0.589	4.7
Naphthalene	1.081	1.021	1.048	1.049	1.009	1.0160	1.037	2.6
2-Methylnaphthalene	0.623	0.591	0.627	0.630	0.604	0.6070	0.613	2.3
Acenaphthylene	2.010	1.708	1.931	1.894	1.958	2.0440	1.924	6.2
Acenaphthene	1.586	1.470	1.577	1.532	1.592	1.5890	1.558	3.1
Fluorene	1.835	1.307	1.335	1.311	1.310	1.3910	1.415	14.7
Pentachlorophenol		0.048	0.045	0.058	0.062	0.0780	0.058	22.7
Phenanthrene	1.219	1.039	1.116	1.085	1.032	1.0450	1.089	6.5
Anthracene	1.093	0.953	1.069	1.095	1.065	1.0750	1.058	5.0
Fluoranthene	1.192	1.050	1.177	1.183	1.223	1.2680	1.182	6.2
Pyrene	1.190	1.027	1.096	1.101	1.072	1.0930	1.097	4.9
Benzo(a)anthracene	1.053	0.910	0.976	1.007	0.997	1.0150	0.993	4.8
Chrysene	1.136	0.945	0.972	0.979	0.942	0.9400	0.986	7.6
Benzo(b)fluoranthene	1.314	1.134	1.179	1.244	1.185	1.1770	1.205	5.3
Benzo(k)fluoranthene	1.339	1.121	1.160	1.231	1.178	1.1620	1.198	6.5
Benzo(a)pyrene	1.159	1.010	1.067	1.139	1.117	1.1290	1.104	5.0
Indeno(1,2,3-cd)pyrene	1.335	1.143	1.211	1.294	1.233	1.2410	1.243	5.4
Dibenzo(a,h)anthracene	1.155	0.993	1.055	1.131	1.075	1.0790	1.081	5.3
Benzo(g,h,i)perylene	1.155	0.978	1.028	1.080	1.011	0.9970	1.041	6.3
Dibenzofuran	2.417	1.908	1.972	1.959	1.921	1.8550	2.005	10.3
Hexachlorobenzene	0.256	0.217	0.233	0.236	0.231	0.2230	0.233	5.7
Hexachlorobutadiene		0.143	0.148	0.150	0.145	0.1460	0.146	1.9
bis(2-Chloroethyl)ether		1.382	1.417	1.391	1.345	1.2820	1.363	3.8
2,2'-Oxybis(1-chloropropane)		1.556	1.572	1.564	1.460	1.4400	1.518	4.1
N-Nitrosodi-n-propylamine	0.846	0.855	0.933	0.637	0.614	0.7660	0.775	16.4
Hexachloroethane		0.388	0.406	0.416	0.398	0.4050	0.403	2.6
Nitrobenzene		0.263	0.286	0.285	0.278	0.2820	0.279	3.4
4-Chloroaniline		0.348	0.453	0.462	0.444	0.3600	0.413	13.2
2,4,6-Trichlorophenol		0.308	0.347	0.349	0.371	0.3810	0.351	8.0
1,1'-Biphenyl	2.471	2.174	2.295	2.178	2.215	2.1760	2.251	5.2
2,6-Dinitrotoluene	0.193	0.212	0.223	0.254	0.292	0.3060	0.247	18.3
2,4-Dinitrophenol		0.084	0.119	0.161	0.205	0.2450	0.163	39.7
2,4-Dinitrotoluene	0.234	0.215	0.251	0.275	0.276	0.3100	0.260	13.0
4,6-Dinitro-2-methylphenol		0.031	0.044	0.051	0.057	0.0650	0.050	26.1
1,2,4,5-Tetrachlorobenzene		0.648	0.682	0.658	0.672	0.6600	0.664	2.0

FORM 6A-OR MODIFIED
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Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-14035

Lab Code: EQI Case No.: 45671

MA No: 2544.1 SDG No.: F6R05

Analytical Method: SVOA SIM

Level: Low

Instrument ID: Agilent MSD4

Calibration Date(s): 12/18/2015 12/18/2015

GC Column: Zebtron ZB-SV ID: 0.25 (mm)

Calibration Time(s): 1425 1636

Length: 30 (m)

Heated Purge: (Y/N) _____

Purge Volume: _____ (mL)

LAB FILE ID: 41218B02 RRF 0.05 = 41218B02 RRF 0.1 = 41218B03 RRF 0.2 = 41218B04
RRF 0.4 = 41218B05 RRF 0.8 = 41218B06 RRF 1.6 = 41218B07

COMPOUND	RRF 0.1	RRF 0.1	RRF 0.2	RRF 0.4	RRF 0.8	RRF 1.6	RRF	%RSD
Atrazine		0.171	0.205	0.191	0.216	0.2260	0.202	10.7
3,3'-Dichlorobenzidine		0.232	0.196	0.269	0.279	0.2890	0.253	15.2
1,4-Dioxane-d8		0.579	0.618	0.555	0.562	0.5560	0.574	4.6
Fluoranthene-d10	0.934	0.981	1.038	1.043	1.160	1.1720	1.055	9.0
2-Methylnaphthalene-d10	0.527	0.557	0.546	0.563	0.569	0.5560	0.553	2.7
Bis(2-Chloroethyl)ether-d8		1.119	1.125	1.064	1.063	1.0270	1.080	3.8
Nitrobenzene-d5		0.101	0.110	0.109	0.110	0.1170	0.109	5.3
2,4-Dichlorophenol-d3		0.219	0.235	0.231	0.233	0.2370	0.231	3.0

Sturges, Susan

From: Whitlee Dean <Whitlee.Dean@csra.com>
Sent: Monday, January 25, 2016 7:22 AM
To: R9RSCC
Cc: bbelding@shealylab.com; dwright@shealylab.com; nmagee@shealylab.com; rzhu@shealylab.com; Flores, Raymond; Gorostiza, Sylvia; Humphrey, Marvelyn; Perez, Myra
Subject: Region 06 | Case 45671 | Lab EQI | Issue Laboratory problems | FINAL
Attachments: 45671_F6R05.PDF; 45671_F6R29.PDF

Good morning,

Issue: Region 9 received hard copies of EQI's responses to results of contract compliance screening for Case number 45671, SDGs F6R29 and F6R05, which is a Region 6 Case.

Resolution: Fed Ex account number 104850952 was provided in order to ship the data to Region 6. Region 6's address for data delivery is below. PDFs are also attached.

USEPA Region VI
Houston Laboratory
10625 Fallstone Road (MS 6MD-HO)
Houston, TX 77099-4303

Please let me know if you have any questions or problems. To waive any defect(s) associated with this issue, please contact your Regional CLP COR.

Thanks,

WHITLEE DEAN
Environmental Coordinator- Regions 6 and 9
CSC Government Solutions LLC, A CSRA Company

6361 Walker Lane Alexandria, VA 22310
t:+1.703.461.2322 | Whitlee.Dean@csra.com
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From: Robert Zhu <rzhu@shealylab.com>
To: wdean9@csgov.com, Brad Belding <bbelding@shealylab.com>, Dan Wright <dwright@shealylab.com>, Neil Magee <nmagee@shealylab.com>
Date: 01/25/2016 09:25 AM
Subject: RE: Region 06 | Case 45671 | Lab EQI | Issue Laboratory problems

Whitlee,

FedEx acct# is 104850952.

Thanks,

Robert Zhu
Technical Director
Shealy Environmental Services, Inc.
803-227-3152 fax 803-791-9111
rzhu@shealylab.com
www.shealylab.com

From: Whitlee Dean [<mailto:Whitlee.Dean@csra.com>]
Sent: Monday, January 25, 2016 9:06 AM
To: Brad Belding <bbelding@shealylab.com>; Dan Wright <dwright@shealylab.com>; Neil Magee <nmagee@shealylab.com>; Robert Zhu <rzhu@shealylab.com>
Subject: Region 06 | Case 45671 | Lab EQI | Issue Laboratory problems

Good morning,

Region 9 has advised that they have received data for Case 45671, which is a Region 6 Case. Please provide an account number so that this data may be shipped to the correct Region.

Please let me know if you have any questions.
Thanks,

WHITLEE DEAN
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----- Forwarded by Whitlee Dean/AMER/CSGov on 01/25/2016 09:01 AM -----

From: R9RSCC <R9RSCC@epa.gov>
To: wdean9@csgov.com
Cc: R9RSCC <R9RSCC@epa.gov>
Date: 01/22/2016 08:02 PM
Subject: Received another Region's Lab response from EQI
Sent by: "Sturges, Susan" <Sturges.Susan@epa.gov>

Hi Whitlee.

Region 9 received hard copies of EQI's responses to results of contract compliance screening (Organics) for CLP Case number 45671, SDGs F6R29 and F6R05. Can you verify which Region these belong to? We can mail the hard copies, but I've attached a PDF of both if